

## System Configuration Team (SCT)

### Reasonable & Prudent Measure #26

#### Meeting Notes

November 18, 1998

#### I. Greetings and Introductions.

The November 18 meeting of the System Configuration Team was held at the National Marine Fisheries Service offices in Portland, Oregon. The meeting was chaired by Bill Hevlin of NMFS, and facilitated by Donna Silverberg. The agenda and a list of attendees for the November 18 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

#### II. FFDRWG Updates.

Mike Mason of the Corps provided an overview of recent Walla Walla District FFDRWG activities, touching first on the FY'99 Lower Granite surface bypass test. No decisions were made about the test at the meeting, he said, other than to designate a FFDRWG subgroup to work more intensively on the details of the surface bypass test for 1999 and 2000. It is hoped that they will complete this task by February. Mason noted that there was a lot of discussion of the monitoring and evaluation facets of the test; there was some interest in increasing the level of M&E, or perhaps developing a different M&E program than has been employed in the past. Basically, we're still on the Option 3 path we laid out at a previous SCT meeting, Mason said.

At the meeting, there was general agreement that the spring test will be with the surface collector operating, while the summer test will be with the behavioral guidance system in place and the surface collector not operating, he continued. The 12-hour vs. 24-hour spill issue has yet to be worked out. Again, these are preliminary recommendations, Mason said; no final decisions have been made, but we're moving forward to narrow down the details of the test.

Mason touched next on the multiple JBS passage study; he said there was a lot of concern expressed at the meeting about the adequacy of the number of PIT-tagged fish and the clarity of the study objectives. It was generally agreed that the Studies Review Work Group needs to give this study quite a bit more attention, he said. The next SRWG meeting is scheduled for November 24; the estuary study and Tom Lorz's CRITFC study will also be discussed at that meeting, Mason said.

A question about Dworshak hatchery improvements led to a lengthy discussion of the Corps O&M vs. CRFM/capital construction funding processes; there was agreement that it may

be desirable for the Corps to make a presentation on the differences between these processes at a future SCT meeting.

Rebecca Kalamasz said she has asked Dave Hurson to find out what has been done to date in terms of Dworshak Hatchery improvements, in response to a question that was raised at a recent FFDRWG meeting. It was agreed that Yoshinaka will provide a list of needed Dworshak Hatchery improvements to Mason, who will report back to the SCT on what has been done at the hatchery to date and what funding options may be available to study those items that still need to be done.

### III. Review and Discussion of Proposed CRFM Program for FY'00.

John Kranda of the Corps distributed Enclosure C, the current draft of the FY'00 CRFM SCT measures worksheet. The first thing you'll notice about this draft, he said, is that there are no dollar amounts listed. What Witt Anderson asked us to do is start with this document, which shows the FY'99 funding level and SCT prioritization for each item; once the President's budget is released, we'll be able to fill in the blanks for the FY'00 proposals, Kranda said. The Corps submitted an FY'00 CRFM budget that is similar in size to what has been submitted in each of the last few years, he said. Basically, what we wanted to get at least a preliminary feel for is whether there is anything that causes heartburn for any of you, from a scope standpoint.

Most of the items on the FY'00 list should come as no surprise, Kranda continued – they are simply continuations of the program decisions we made for FY'99, and I can't see our overall priorities changing that much from FY'99 to FY'00. At his request, the group spent a few minutes going through the spreadsheet, noting the work status of each item in FY'00 – whether it is to be completed, continued, constructed, tested or deferred. These notations are captured on the spreadsheet draft attached as Enclosure C.

Ron Boyce asked about the possibility of adding an investigation of McNary drawdown to the Lower Columbia Feasibility Study. Actually, the placeholder for that item would include starting to study McNary drawdown, subject to Congressional approval, Kranda replied. In response to another question from Boyce, Kranda said more detailed work plans for the FY'00 program items should be available at the same time the Corps releases the FY'00 budget figures – around mid-February.

Based on the SCT's initial review, have we left any major program items off the FY'00 list, or included anything that shouldn't be there? Kranda asked. I think this is a good starting-point, Boyce replied; however, I would like to have an opportunity to discuss this spreadsheet with the other salmon managers, and bring any comments we may have to the December SCT meeting. It was so agreed.

Phil Thor asked whether, in Hevlin's opinion, there is anything in the existing Biological Opinion that will require additional new capital construction projects that would begin in FY'00 or later. We've been through this FY'00 spreadsheet several times, Hevlin replied, and the consensus was that this covers what is in the BiOp.

In response to another question, Mason said that, after all of the FY'99 items have been funded, there still remains \$4 million-\$5 million in flexible FY'99 program funding, for projects

to be identified by FFDRWG.

#### IV. Initial Discussion of Criteria Development for Prioritization of FY'00 Activities.

What we would like to concentrate on, in this initial discussion of the development of criteria for the SCT's FY'00 prioritizations, is what worked in FY'99, and what didn't work, Silverberg said. The group concentrated a few minutes' effort on this topic, an exercise which yielded the following list of items:

##### What Worked in FY'99:

- assigning scores to each item was useful
- the framework or skeleton of high, medium and low-priority items helped focus discussion on controversial items, rather than items that enjoyed broad support
- developing SCT criteria as a group was useful
- unbundling larger program items to get at specifics worked
- work plans

##### What Didn't Work in FY'99:

- tribal criteria and priorities were not adequately included
- cost estimates were not solid enough; the cost of too many items increased between initial proposal and implementation
- changes in funding level sometimes led to confusion as to what work was and was not included in a given item's scope of work
- better definition of the prioritization criteria, to ensure consistent, uniform application by all SCT members, is needed
- once a ranking plan is developed, stick with it through the whole process (John Day extended screens was cited as an FY'99 example of inconsistent application of criteria)

BPA's John Rowan made the point that, the more controversial a given item is, the more important the criteria that were used to establish the ranking of that item become. That way, he said, you can hold people accountable for the position they take, pro or con, on a given item. I think at times, particularly toward the end of the FY'99 ranking process, the application of the criteria became an internal, rather than an external, exercise, Rowan said. In FY'00, the more transparent we can make the application of the SCT criteria, the better off we'll be.

Rowan cited the example of CRITFC's often-stated position that no further capital construction projects be undertaken at the Lower Snake dams, because of the possibility that those dams may be removed. Others have argued that, while they understand CRITFC's point, there are valid reasons, such as interim biological benefits, to continue with certain activities and projects at the Lower Snake dams. It becomes a head-butting exercise, unless you have criteria in place to weight things like the importance of near-term survival benefits from a given action at, say, Lower Granite, Rowan said.

What would CRITFC do in a case like that, if they were part of this process? asked Phil Thor of BPA. We probably wouldn't agree with that criteria, replied Tom Lorz of CRITFC. We might argue that the near-term benefit doesn't justify the expense of that project, or that it might preclude a more beneficial long-term action.

After a few minutes of further discussion, Silverberg suggested that the SCT review its 1998 criteria prior to the group's next meeting, with an eye toward what may need to be changed, fine-tuned or amplified for 1999. If we do that, she said, we can probably have a more meaningful discussion at the December SCT meeting. Boyce said that, while he is not averse to discussing the criteria themselves, he also would like to discuss how the criteria will be applied in the FY'00 ranking process, to ensure that their application is as logical and systematic as possible.

#### V. Discussion of Draft Comments on BOR's Appraisal-Level Study Report of the Five Gas Abatement Alternatives for Grand Coulee.

Monte McClendon of the Bureau of Reclamation said that, at last month's SCT meeting, Kathy Frizell of BOR's Denver office provided a briefing on the five Grand Coulee gas abatement alternatives that have been selected for further study. We requested that any SCT comments on that appraisal-level report be submitted to the Bureau by November 30, he said, so that we can proceed with a feasibility-level study of three of those alternatives, beginning in December. If anyone has comments they would like to provide today, he said, I'd be glad to hear them.

NMFS' Steve Rainey prefaced his comments on the report by saying that, particularly at Grand Coulee, there is the potential for some real inefficiency unless gas abatement at that project is considered in tandem with gas abatement at Chief Joseph Dam. If you consider both projects together rather than separately, he said, I think there is great potential to achieve greater gas abatement benefits for whatever amount you ultimately spend.

In terms of the Grand Coulee report, Rainey continued, I think the Bureau has done an excellent job of laying out specific alternatives for abating gas at that project. My concern, after looking at both Chief Joseph and Grand Coulee, is that you have the potential to spend a great deal of money at Grand Coulee for a relatively small gas abatement benefit, he said.

One technical question that was raised the last time we discussed this report was, what is the appropriate high design flow? said Rainey. Reclamation used a 50 Kcfs design spill as the sideboards for the development of the gas abatement alternatives that would abate gas most efficiently; there was some question about whether that was an appropriate design flow, or whether it should be something more like 10% powerhouse flow and all the rest spill, Rainey said. Reclamation has assured us that it wouldn't be too difficult to plug in a different design flow – 80 Kcfs or 100 Kcfs – at a later time. So for now, Rainey said, at a NMFS technical level, we concur that 50 Kcfs is an appropriate design flow for the purposes of taking this analysis to the next step.

Boyce said Oregon's comments will include the recommendation that the Bureau look at a wide range of project operations, including spill levels, rather than locking on to 160 Kcfs powerhouse flow and 50 Kcfs spill. Is it still Reclamation's intent to look at the single spill level to compare the different alternatives? he asked. We are looking at 50 Kcfs, McClendon replied; if we want to add more spill, we will need to add more draft tubes, at an incremental cost increase. It may be possible to look at some range of spill, Frizell said, but our intent was to put

numbers to each of the alternatives up to the capacity of that alternative. Phil Thor suggested that 50 Kcfs would probably be a reasonable number to use in assessing the potential benefits of the three options selected for further study, as long as people recognize that those benefits may be different under different spill conditions.

Rainey returned to his point that gas abatement at Grand Coulee and Chief Joseph should be looked at in tandem, saying that it might be possible, if the two projects were approached as a single unit, to do something like increase powerhouse flow at Grand Coulee while concentrating most of the structural gas abatement modifications, such as flow deflectors, at Chief Joseph, so that more spill could occur at that project. I agree, said Thor – trying to do this piecemeal, by designing separate solutions for Grand Coulee and Chief Joseph, without knowing how we might more efficiently address gas abatement in a systemwide context, strikes me as premature. One of BPA's comments will be to suggest that this report, in its current state, probably meets the need identified in the Biological Opinion, Thor said – there may not need to be any additional detailed technical work at this point. Rather, it would probably be more appropriate and useful for the Bureau to make a contribution toward the systemwide gas abatement study underway through the

Transboundary Gas Group. Does NMFS concur with the idea that this report meets the need identified in the BiOp, or, in your opinion, is further technical study of the Grand Coulee alternatives needed at this time? Thor asked.

I think that the coupling of the Bureau's appraisal-level Grand Coulee report with the ongoing systemwide planning efforts gets to the BiOp requirements, replied Mark Schneider of NMFS. In my opinion, that would be very much in line with what the BiOp intends, Schneider said -- whether it satisfies all of its requirements is another matter, of course. Another thing to consider is the fact that the systemwide planning effort, as it stands now, is severely underfunded, said Thor – it strike me that the money the Bureau would spend to produce its next level of study on the Grand Coulee gas abatement alternatives might more efficiently be spent on the Transboundary Gas Group's systemwide gas abatement study.

Boyce raised the concern that the systemwide gas abatement study is likely to take many years to complete, and that it may not make sense to put the Grand Coulee gas abatement effort on hold until the systemwide study is finished. Thor made the point that it probably isn't necessary to put the further development of gas abatement alternatives at Grand Coulee on hold until the systemwide study is complete, but it may make sense to hold off at least until the Transboundary group has made some progress. Hevlin said the Colville Tribes in particular are interested in seeing gas abatement at Grand Coulee move forward, and said that, from his perspective, it makes sense for the Bureau to keep moving forward with the development of its alternatives while they still have some momentum going.

Rainey added that, based on relative cost and the likely availability of funding, NMFS would prefer to see the Bureau study Alternatives 1, 3 and 4, rather than Alternatives 2 and 5, which are probably too expensive to have a realistic hope of implementation. After some minutes of further discussion, McClendon asked that any further SCT comments on this study be provided to him no later than November 30.

## VI. Gas Abatement at Chief Joseph – Plan and Funding.

Marian Valentine briefed the SCT on the Corps' study of gas abatement alternatives at Chief Joseph Dam, working from a series of overheads. These overheads are attached as Enclosure D; please see this document for details of Valentine's presentation. Among the highlights:

The 10-year, seven-day design flow the Corps will be using in the Chief Joseph study is 250 Kcfs.

Problems at the site include the fact that Chief Joseph inflow experiences very high TDG levels from spill at upstream reservoirs, that degassing does not occur in Rufus Woods Lake, that the Chief Joseph powerhouse passes high TDG levels downstream, that the project's spillway supersaturates TDG, that the dam is operated for power peaking/load following and that, as a result of these factors, TDG levels downstream of the project frequently exceed the current water quality standard of 110%.

Based on its analysis of the problems and possible solutions, the Corps will carry nine Chief Joseph gas abatement alternatives forward for further study. They include:

Spillway flow deflectors (Alternative 1)

Side channel canal (Alternative 2)

Degas at Brewster Flats (Alternative 16)

Operate hydropower units outside peak efficiency range (Alternative 3)

Spill during maximum power generation (Alternative 9)

Swap power for spill with downstream dams (Alternative 11)

Raise control flows at The Dalles (Alternative 13)

Modify operation of Grand Coulee Dam (Alternative 14)

Some combination of Alternatives 3, 11, 13 and 14

Dissolved gas abatement studies related to Chief Joseph include the Corps' study of Chief Joseph-only gas abatement alternatives (now underway), the joint Grand Coulee-Chief Joseph study proposed by the Bureau of Reclamation in August 1998 (proposed for funding) and the Transboundary Gas Group's systemwide gas abatement study (preliminary phase underway).

The next phase of the Chief Joseph gas abatement study could include a more detailed evaluation of alternatives, a flow deflector fast-track approach or the joint USBR/Corps study referenced above.

The Corps' goal is to complete its evaluation report on gas abatement alternatives at Chief Joseph by the end of FY'00.

Valentine also distributed copies of a Corps report, dated November 1998 (attached as Enclosure E) which provides further detail on the nine Chief Joseph gas abatement alternatives selected for further study.

In response to a question from Steve Rainey, Valentine said that Corps funding for the next phase of the Chief Joseph study has not yet been made available; internal discussions have led to the conclusion that these dollars will need to come from the direct funding source. Given the fact for the next phase of study at Chief Joseph would have to compete for funding with things like auxiliary water pumps and additional study at McNary Dam, Rainey said, it sounds as

though the Chief Joseph study may be put on the shelf for now. In response to a question from Boyce, John Kranda said CRFM funding cannot be used for the Chief Joseph study because, according to the Congressional authorization, CRFM funds can only be used for projects at the eight federal mainstem dams. Further discussion yielded the suggestion that the study could be funded through direct Congressional appropriation.

In response to another question from Boyce, Valentine said the cost estimate for the side-channel spillway alternative is in the \$300 million- \$500 million range. That's at least ten times the cost of flow deflectors at Chief Joseph, she said, which probably takes it out of the range of feasible alternatives. In response to another question, Valentine said she has requested funding to begin model studies of the flow deflectors this January, and to carry forward with the evaluation report. We need to be able to provide that document to our headquarters in order, ultimately, to get Construction General funding for actual construction, she explained. By the end of FY'00, we hope to be in a position to request that whatever alternative is selected be considered for CG funding, Valentine added. Hevlin said that Witt Anderson has told him that funding for at least the model studies portion of the Chief Joseph evaluation will probably be available.

Boyce observed that the gas abatement investigations at Grand Coulee and Chief Joseph, if brought to a successful conclusion, provide an opportunity to alleviate a good portion of the TDG problems in the Columbia Basin; he reiterated that the systemwide gas abatement study offers the best opportunity to achieve that success, in terms of both gas reduction and cost-effectiveness. Hevlin suggested that, at the next SCT meeting, Jim Ruff and Mary Lou Soscia be asked to brief the group on the current status of the Transboundary Gas Group's systemwide planning effort; it was so agreed. Boyce added that some discussion at that meeting of the possibility of a jointly funded USBR-Corps study of gas abatement at Chief Joseph and Grand Coulee would also be helpful. Bolyvong Tanovan cautioned that it may not be realistic to place too much hope in the success of the Transboundary Gas Group's efforts, given the fact that the TGG has no funding, formal direction or authority at the moment.

Valentine asked that the SCT review Enclosures D and E and provide any comments they may have to her by December 4. What we're looking for is some direction from this group as to the way to proceed in the most cost-effective manner, she said.

## VII. Next SCT Meeting Date and Agenda Items.

The next meeting of the System Configuration Team was set for Wednesday, December 16, from 9 a.m. to 4 p.m. at NMFS' Portland offices. Meeting notes prepared by Jeff Kuechle, BPA contractor.